



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,463	04/19/2001	Wadood Hamad	IP-6084	2092

23566 7590 12/30/2002

OSTRAGER CHONG & FLAHERTY LLP
825 THIRD AVE
30TH FLOOR
NEW YORK, NY 10022-7519

EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
----------	--------------

1731

8

DATE MAILED: 12/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/838,463

Applicant(s)

HAMAD ET AL.

Examiner

Steve Alvo

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-15 and 17-23 is/are rejected.
- 7) ☒ Claim(s) 16 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1731

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 11, 13-15, 17, 19, 20 and 23 are rejected under 35 U.S.C. 103(a) as obvious over CHASE '403 in view of SETH et al (1975 article) or SETH et al (1993 article) or SETH.

CHASE '403 teaches using empirical methods and techniques of regression analyses to determine functional relationships between material properties and the strength of the paper for a grade of paper (column 14, lines 29-34). SETH et al (1975 article) or SETH et al (1993 article) or SETH teaches that fractional toughness measurements can be used to determine the strength of paper. It would have been obvious that the regression analyses to determine functional relationships between material properties of CHASE '403 could be related ^{to} the fracture toughness of SETH et al (1975 article) or SETH ET AL (1993 article) or SETH as the fracture toughness is a measure of the paper strength. See Figure 1 of CHASE '403 for using caliper, basis weight, moisture (humidity), additives (column 9, line 35) and softwood ratio as the variables of CHASE '403. See CHASE '403 for monitoring the variables after a grade is identified and then providing output signals to control the strength or the fracture toughness of SETH et al (1975 article) or SETH ET AL (1993 article) or SETH.

Claims 12, 16, 18, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHASE '403 in view of SETH et al (1975 article) or SETH ET AL (1993 article) or SETH as applied to claim 10 above, and further in view of HART.

Art Unit: 1731

HART teaches automatic control of a paper machine and teaches using many if the same measurements used by CHASE '403, e.g. basis weight, caliper, moisture, and additives (82), (83) and (84) including filler (alum). It would have been obvious to the routineer that alum (filler) could have been one of the additives measured by CHASE '403 in the manner taught by HART.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over CHASE '403 in view of SETH et al (1975 article) or SETH ET AL (1993 article) or SETH as applied to claim 10 above, and further in view of PAGE et al.

CHASE '403 teaches controlling the strength during newsprint production (column 15, lines 42-57. PAGE et al teaches that the fracture resistance for different grades can be measured and used to determine which grade (product) is less likely to break during printing. This would represent the best strength for the grade to be to prevent breaks in the pressroom. It would have been obvious to control the variables of CHASE '403 to obtain the strength to prevent breaks as determined by PAGE et al

The argument that AHRENS is not combinable with CHASE '403 as AHRENS is drawn to a brittle material is moot as newly applied of SETH et al (1975 article) or SETH ET AL (1993 article) or SETH are all drawn to paper which is the same material as CHASE '403.

The argument that CHASE '403 does not measure fracture toughness is not convincing as CHASE '403 measures paper strength. The fracture toughness is directly related to the paper strength, as it is a measure of the force needed to rupture the paper. It would have been obvious to use the paper fracture toughness of SETH et al (1975 article)

Art Unit: 1731

or SETH ET AL (1993 article) or SETH for the paper strength measurements of CHASE '403.

The argument that the art does not teach the specific equations of claims 16 and 24 is not convincing as these are routine calculations of the functional relationships of the measured values and would have been obvious to an engineer given the teachings of CHASE '403 and of SETH et al (1975 article) or SETH ET AL (1993 article) or SETH.

The argument that CHASE '403 does not teach measuring the alum and controlling the paper fracture toughness based on the alum measurement is not convincing, as the claims are not so limiting. The claims merely call for the filler to be measured and the paper machine controlled from the filler measurement. Such measurement and control is taught by HART. When filing an **"Official" FAX** in Group 1730, please indicate in the Header (upper right) **"Official"** for papers that are to be entered into the file. The **"Official" FAX** phone numbers for this TC 1700 are:

Non-Final Fax: (703) 872-9310

After-Final FAX: (703) 872-9311

When filing an **"Unofficial" FAX** in Group 1730, please indicate in the Header (upper right) **"Unofficial"** for Draft Documents and other Communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers. The **"Unofficial" FAX** phone number for this Art Unit (1731) is **(703) 305-7115**.

Any inquiry concerning this communication or earlier communications from the **primary examiner** should be directed to **Steve Alvo** whose telephone number is **(703) 308-2048**. The Examiner can normally be reached on Monday - Friday from **6:00 AM - 2:30 PM (EST)**.

Art Unit: 1731

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Stanley Silverman, can be reached on 703-308-3837.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is **(703) 308-0661**.

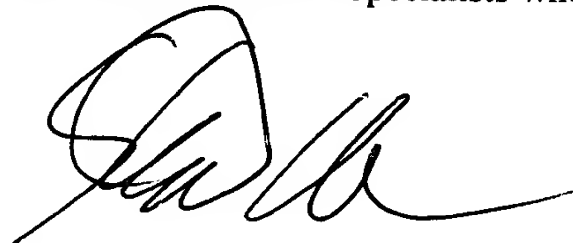
The **Customer Services Center for Technology Center 1700 (703-306-5665)** shall provide the following service assistance to external and internal customers in the areas listed below.

Services provided:

- Patent Application Filing Receipts
- Missing References
- Information regarding When Action can be Expected
- Lost/Misplaced/Requested Application retrieval
- Retrieval from PTO Publication Branch
- Retrieval from non-Publication Branch
- Status Queries (written or oral)
- Paper Matching Queries
- Certificates of Correction.
- Printer Waiting

The Customer Service Office, TC 1700, is located in CP3-8-D13, and is open to receive requests for service in person, by phone **(703) 306-5665**, or E-mail "Customer Service 1700" from 8:30 am-5:00 pm each business day. The Customer Services Center is part of the Special Programs Office of TC 1700 and will be staffed by the Technical Information Specialists who will serve as Customer Service Representatives (CSR).

MSA
12/27/02



STEVE ALVO
PRIMARY EXAMINER
ART UNIT 1731